# hff: EQUIPMENT REVIEW

# Dan D'Agostino Master Audio Systems Progression preamp and stereo amplifier

by Alan Sircom

he Dan D'Agostino Master Audio Systems Progression range is designed to sit under the mighty Momentum. But, unlike most brands that make the cheaper line 'lite' or 'stripped-down', D'Agostino makes the two lines entirely different in performance!

This is not something new for D'Agostino. Back in the 1980s, the two products from Dan's drawing board that everyone wanted were either the KSA-50 or the KSA-250. The KSA-50 was the lower-powered, deceptively powerful pure Class A design, and the KSA-250 was the powerhouse. Watt for watt, the KSA-50 was considerably more expensive. Fast-forward to 2018 and the Progression Stereo delivers more power than its more upmarket Momentum Stereo counterpart.

And then there's the preamplifier. The Momentum is a more uncompromising design (balanced operation only, none of that built-in optional DAC or Bluetooth operation for the remote) and the Progression looks like the more flexible option, rather than a 'discount design'.

Progression came about because of the runaway success of Momentum. The Momentum amps became one of the most common must-have electronics for highend and super-high-end audio systems, and those who lacked enough folding to reach Momentum levels wanted a piece of the action. Momentum Stereo came about, but this was still a lot of money for a stereo chassis, and Dan's loyal following (many of whom stopped buying 'the other brand' when he left) wanted a product that could reach the attainable level. Instead, they got a whole product line, starting – like the Momentum series before it – with the power amplifiers, and recently the preamp.

The Progression Preamplifier is every inch a D'Agostino design. Like the Momentum before it, the Progression avoids negative feedback altoghether. "It is not used anywhere in the Progression Preamplifier," says D'Agostino, "nor is it necessary." And yet, this is a very linear, extremely wide bandwidth design. Open-loop distortion is less than < 0.006% and the open loop bandwidth extends to over 100KHz. This would normally suffer from picking up mobile cell phone 'polling', but that solid, two-chassis-in-one case prevents RF noise pick-up very effectively. This is similar to the Momentum, just in a chassis that a human can lift without bursting something.

However, Progression adds new features previously not included in any preamplifier that has Dan's design fingerprints. Most noticeably, the Progression preamp features an optional digital module. The digital module adds coaxial, Toslink, and USB capability to the base analogue base model. A fully differential DAC handles PCM signals up to 24 bit/384 KHz and DSD signals up to 4xDSD (11.2 MHz). This digital module feeds a discrete, fully complementary and balanced analogue signal path from input to output.

D'Agostino has also adopted Bluetooth in the Progression, but in entirely not the way you were thinking. Bluetooth is only used for the remote control. In a gem of a 'why didn't I think of that' notion, using Bluetooth to send remote codes from handset to chassis means the line-of-sight problems that beset IR handsets are eliminated, and the range of the handset suddenly becomes measured in tens of metres. This is central to the Progression and isn't a function of the optional DAC, and anyone trying to use the Progression's Bluetooth technology to send their own sounds from phone to D'Agostino is going to be disappointed. And most audiophiles will be very happy at that.

The volume control features a stepped balanced resistor ladder, using highlinearity solid-state relays and discrete precision resistors. The performance of these devices means that in theory at least, bandwidth and transient response of the preamplifier circuitry are unaffected by volume setting. The Progression Preamplifier has two independent outputs that can be individually operated or used simultaneously for driving a second amplifier in a subwoofer based system.

### EQUIPMENT REVIEW / D'AGOSTINO PROGRESSION PRE/STEREO



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Like its bigger brother, the Progression power supply makes extensive use of electrical and magnetic shielding to keep radiated interference away from critical preamplifier circuits. Internal circuitry filters RF noise on the mains input, and compensates for asymmetric power waveforms and DC on the mains. A second DC output is included to power future Progression source components. It doesn't take a black belt in rocket surgery to get to the words 'phono stage' here.

The central 'Captain Nemo' VU meters at the centre of the Momentum's dial was not practical in the Progression pre, so instead there are two smaller VU metres. These flip between acting as VU meters when playing music to volume indicators when adjusting the volume, or balance indicators. That, plus the central volume control (which feels almost as nice as the one on its bigger brother), and the illuminated buttons on the front panel, makes for a look that is surprisingly sophisticated in the flesh

Meanwhile, the Progression Stereo Amplifier uses the company's innovative 'Super Rail' circuitry, first unveiled in the Progression Mono. Every amplifier employs two voltage rails, a positive one and a companion negative rail. Voltage rails support the delivery of power to the speaker. The music signal swings between these two rails, but never quite reaches the output rails' full capability. Allegedly borrowing the idea of a turbocharger in a car engine, D'Agostino's Super Rail uses higher voltage rails in the sections prior to the output stage, to allow the musical signal to exploit the full capability of the output voltage rails.

Dan D'Agostino was never a believer in the 'power corrupts' argument. To Dan, "abundant" power is required for realistic sound quality, and that abudnance is a cornerstone of D'Agostino's amplifier designs, past and present. The Progression Stereo continues this practice. Its aluminium chassis houses a power supply transformer with nearly 3kVA of apparent power, coupled to 400,000µF of storage capacitance. Paired to this foundation is a fully complementary driver stage, and output circuitry outfitted with 48 power transistors - 24 each for the left and right channels. As a result, the Progression Stereo is conservatively rated at 300 Watts into 8 Ohms and delivers 600 Watts into 4 Ohms, and properly doubles its output again into 2 Ohms, with a 1,200 Watt power output.

Reputed to be inspired by Dan's collection of classic Swiss watches, the Progression Stereo is fronted by an exposed movement power meter. This features two 90-degree needle swing arms, and a high-speed ballistic circuit enhances the meter's responsiveness. Longer swing arms improve readability across the amplifier's entire output range, although in use, I can't help thinking those musical swings are rarely that power hungry in the real world.

The venturi style heatsink design, premiered in the Momentum amplifiers, has been adapted to the cooling needs of the Progression Stereo amplifier. Starting with a 22kg aluminium slab (not pure copper this time), each heatsink is milled to form the most efficient cooling element possible. As a result, the Progression Stereo amplifier runs surprisingly cool due to its innovative heatsink design. Standard finishes include silver and black with custom painted finishes available on request.

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This is in a way the best of all possible worlds, or at least the best of D'Agostino's output. The Stereo manages somehow to combine the suave, sophisticated sound of the Momentum, with the dynamism, the energy, and sheer slam of 'the old company'. It's as if Dan got all his best products in one room and made something that takes the best of all of them.

The amplifiers (alone or in combination) deliver a sense of authority the like of which few have heard from an amplifier in decades. We use the term 'muscular' occasionally in audio reviewing, but this is the difference between 'I work out' muscular and 'I just pulled a 20-ton truck with my teeth' muscular, and you hear it at the first beat of a kick drum. That bass takes on a visceral, physical intent rather than just air moving. Listening to Bernard Purdie take his turn on 'Memphis Soul Stew' [*King Curtis at Fillmore West*, ATCO] as he warmed up, you could hear the difference. The drum beat was fast and powerful, but didn't swamp the tiny squeak of the drum pedal. Then the bass kicks in and suddenly you understand what 'solidity' is supposed to mean; not stodgy soundstaging, but the distinct feeling that someone is standing on stage.

It's not just about muscular 'slam' and solidity. There is some real subtlety going on here. If an engineer tried to get away with a failing preamp tube on the second violins' microphone preamp tube, the hiss will be clear enough to try and shout at the mixing engineers. And dynamic range is off the charts awesome; play Rachmaninov's Symphonic Dances [Telarc] and you'll jump out of your skin a couple of times in the first few minutes.

That old canard about big amps can't 'time' is also put to bed here. This is an amp combination with an infectious sense of rhythm; especially the preamplifier it seems, which has a fine sense of funkiness in the presence of Funkadelic recordings. OK, so *Maggot Brain* [Westbound] probably isn't the first choice of audiophile listeners, but it's worth persevering (perhaps). This album requires an amp with lots of fast-twitch fibres, and the Progression duo don't disappoint. That legendary Eddie Hazel fuzz solo sounds wonderful.

In performance terms, the Progression duo are so good, it makes me wonder whether they cut in on the Momentum integrated or M-Life models. Granted in modern audio one shelf is better than two, but in absolute performance terms, good though the Momentum integrated is, the gap between the two products is wafer thin, and I keep thinking I would end up with the Progression pair.

I am of two minds about the D'Agostino Progression, both of them good. First, I can't help feeling that the Progression is just that – progress by D'Agostino. This series is not simply D'Agostino making more attainable products; it's adding things to the amp concept, some of which I can't help thinking will end up in the top line. Second, I have a distinct impression that these amps sound 'almost' as good as the big guns. In some respects, they

#### **TECHNICAL SPECIFICATIONS**

Type: line preamplifier Inputs: 4x XLR, 2x RCA, RS232 port, 2x 12v, Bluetooth (remote only) Optional digital inputs: USB Type A, Optical Toslink, S/PDIF Coaxial Outputs: 2x XLR Frequency Response: 0.1Hz-1MHz, -3dB THD+N: < 0.018% , 20 Hz to 20kHz Signal to Noise ratio: -95dB, unweighted

Type: solid-state power amp Inputs: 2x XLR

Price: £24,998 (£29,998 digital)

Power Output: 300W (8Ω), 600W (4Ω), 1,200W (2Ω)

Frequency Response: 1Hz-200kHz, -1 dB Distortion: 300 watts @ 8Ω 0.15% @ 1 kHz Signal to Noise ratio: 105dB, unweighted Dimensions (H×W×D): 45.7x50.8x19 cm Weight: 57kg Price: £24,998 Finishes: Silver, black, custom on request

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may even sound better. Far from being Momentum-lite or MyFirstD'Agostino, the Progression amplifiers are well-matched, well engineered, and well nigh endlessly powerful for most modern systems. What's great here is not just that D'Agostino managed to make something as attractive and as good sounding for almost half the price, but that for most people those more attainable Progression models are more than enough. In a straight fight, the D'Agostino Momentum models are the better products, but their biggest rivals are their little brothers. +